

Tile Tester

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What we know (from pCDR)

- The geometry
- Size of PCB
- Distance between fiber and SiPM
- There will be no optical connection between fiber and SiPM

Simulations

Hadronic Calorimeter

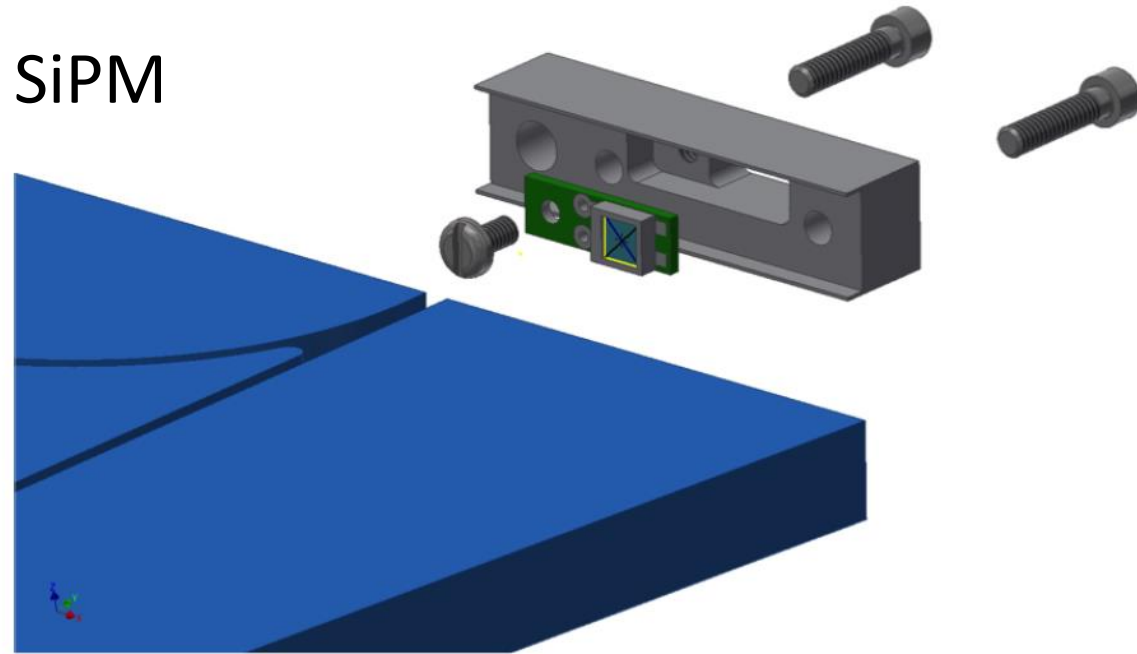


Figure 6.6: Design of the small plastic fixture coupling the fiber to an SiPM.

We need to know for the next step

- What we have on the PCB
- Rough estimation about the number of photons
 - from a cosmic muon in the tile,
 - in the fibers,
 - at the SiPM
- and the signal from preamp (amplitude, length ...)

Our v0 plan

- Use what we have in SiPM tester
- Redpitaya, need the signal to its ADC
- 8 channels needs 4 Redpitaya and minimal changes in FPGA and C code.
- The result can be in root, but we can create a simple GUI with green/red light

